

**SAMSUNG**

## OWNER'S INSTRUCTIONS

**MODEL:**

**RL29TAV\***

**RL31TAV\***

**SAMSUNG**

**ELECTRONICS**



- ◆ Please read all the safety precautions included in this manual prior to use and retain this manual properly for future reference.
- ◆ Please read through this manual before connecting to power and keep it for future reference.
- ◆ Any change relating to this manual will result in no additional notice due to continuous improvement made on our products.

**Register your product at [www.samsung.com/global/register](http://www.samsung.com/global/register)**

DA68-01471B

# ■ CONTENTS

|  |    |
|--|----|
| Parts Description-----                       | 2  |
| Safety notes-----                            | 3  |
| Pre-running Issues-----                      | 4  |
| Installation and Positioning Notes-----      | 5  |
| Control Panel Introduction-----              | 6  |
| Storing Foods(close gap)-----                | 9  |
| Maintenance and Cleaning-----                | 10 |
| Dismount method of attachment -----          | 11 |
| Trouble Shooting(close gap)-----             | 12 |
| Technical Parameters and Circuit Diagram---- | 14 |

# TECHNICAL PARAMETERS ■

| Model \ Name                                |                 | RL29TAV*        | RL31TAV*     |
|---|-----------------|-----------------|--------------|
| Climate type                                |                 | ST, SN, N       |              |
| Electric shock proof                        |                 |                 |              |
| Available Capacity (L)                      | Total           | 252             | 270          |
|   | Refrigerator    | 134             | 152          |
|   | Freezer         | 50              | 50           |
|   | CoolSelect Zone | 68              | 68           |
| Rated voltage/frequency                     |                 | 220V-240V~/50Hz |              |
| Total input power (W)                       |                 | 110W            |              |
| Lamp max. power (W)                         |                 | 25              |              |
| Power consumption kWh/24h                   |                 | 0.69            | 0.70         |
| Freezing capacity kg/24h                    |                 | 15              | 15           |
| Refrigerant and dosage(g)                   |                 | R600a,52g       | R600a,53g    |
| Weight (kg)                                 |                 | 78              | 82           |
| Overall dimension (width*depth*height) (mm) |                 | 595*679*1766    | 595*679*1851 |

This instruction includes two similar models of RL29TAV\* and RL31TAV\*, where RL31TAV\* is dominated by this description.

\* Representative Color:

S-Titanic Silver, W- Snow White, P- Pearl Blue

- Please read this manual and use it as instructed. The messages marked with "Warning" and "Notes" are about safety and of high importance. Please read it carefully and repeatedly.

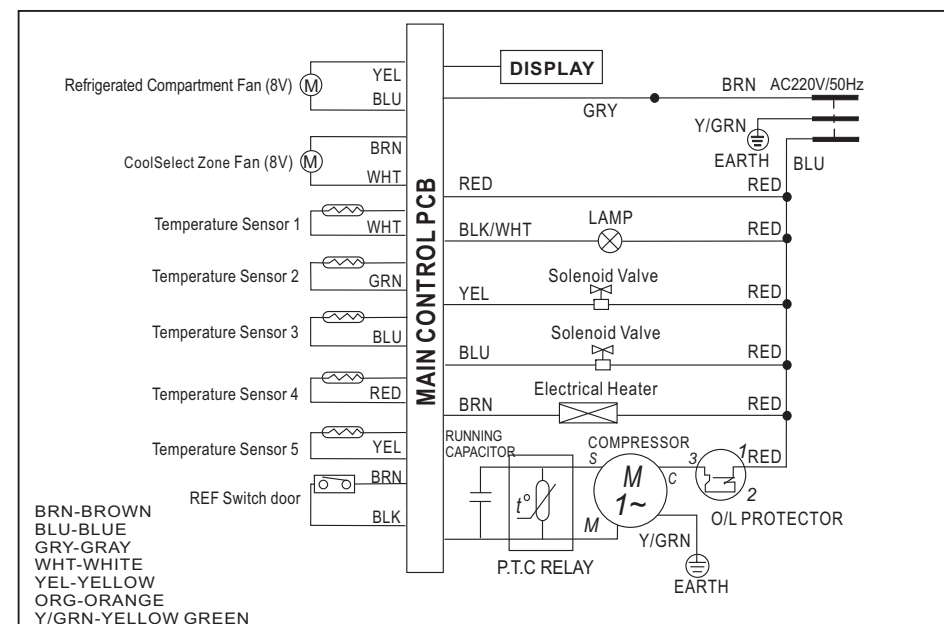
## WARNING

This means it is possible to cause potential and severe damage if the instructions are not followed.

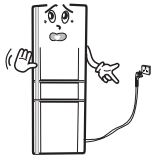
## PRECAUTIONS

This means it may cause slight damage or performance failure if in certain cases it is not avoided.

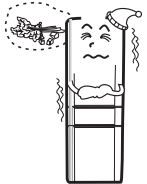
# ■ CIRCUIT DIAGRAM



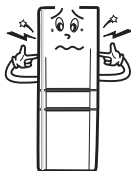
## ■ TROUBLE SHOOTING



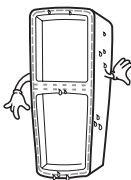
- ◆ **The refrigerator is not working**
  - The plug is not connected correctly.
  - The power is not connected.
  - The refrigerator plugs in again after power failure for less than 5 minutes.



- ◆ **The foodstuff is frozen**
  - The set temperature is too low.
  - The foodstuff is stored close to cold source on the back wall.
  - The refrigerator is in the Super Cool mode.



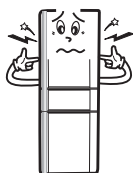
- ◆ **The noise is produced in the unit**
  - The foodstuff is not placed evenly.
  - The setting is not stable.
  - The unit is placed too close to the wall.
  - The outer freezing duct collides with each other or it is pressed against the refrigerator wall.
  - There are foreign objects at the back and bottom of the unit.
  - The noise is produced when the compressor is running.



- ◆ **The front frame or the side plate of the refrigerator heats**
  - There is the anti-condensation pipe installed in the unit to avoid vapor condensation on the frame and the heat is produced when the unit is running. That is not a failure.
  - There are heat sinks (condenser) installed mounted on both sides of the refrigerator.



- ◆ **Frost on the back wall of the Fridge**
  - It is a normal situation when the refrigerator runs.
  - It will automatically disappear after the unit stops working.
  - The food and the food container cannot be pressed against the back plate.



- ◆ **The Ice cracks sound is heard**

When the unit is started or stopped, the ice cracking sound is heard for a while because it is caused by the imbalanced expansion or shrinking of the internal parts due to the extreme temperature change. This is not a failure.

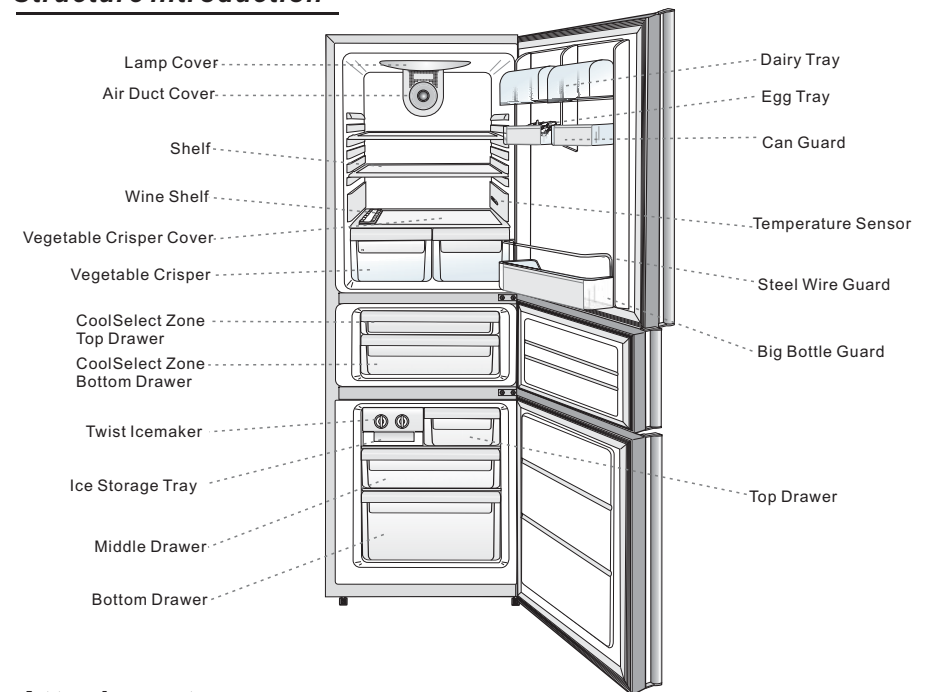
After following the troubleshooting and the problem is not improved, please visit the special appointed service centers with "Product Warrant Certificate" for the service or contact SAMSUNG technical service center.

## ■ PARTS DESCRIPTION

### Product features

- **Multiple Functions:** The Coolselect Zone can be switched; six-level thermo-regulation for variable temperature freezer; quick-freezing, quick cooling and Vacation function, etc.;
- **Stylish Appearance:** LCD display, all contributing to a luxury style.
- **Efficient and Energy Saving:** Using highly efficient compressor, saving energy with low noise;
- **3-D Cooling:** Using direct current blower fan, dynamic cooling with a more uniform temperature in the chamber.

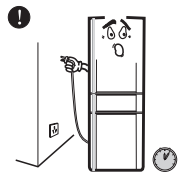
### Structure introduction



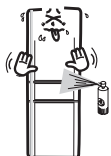
### Attachment

| Name<br>Model | Shelf               | Drawer<br>(Top/Middle/Bottom) |            | CoolSelect Zone Drawer<br>(Top/Bottom) |          | Vegetable Crisper<br>Cover | Vegetable<br>Crisper | Twist<br>Icemaker |
|---------------|---------------------|-------------------------------|------------|--|----------|----------------------------|----------------------|-------------------|
| RL29TAV*      | 2                   | 3                             |            | 2                                      |          | 1                          | 2                    | 1                 |
| RL31TAV*      | 2                   | 3                             |            | 2                                      |          | 1                          | 2                    | 1                 |
| Name<br>Model | Ice storage<br>Tray | Wine Shelf                    | Dairy Tray | Can Guard                              | Egg Tray | Steel Wire Guard           | Big Bottle Guard     |                   |
| RL29TAV*      | 1                   | 1                             | 2          | 1                                      | 1        | 1                          | 1                    |                   |
| RL31TAV*      | 1                   | 1                             | 2          | 2                                      | 2        | 1                          | 1                    |                   |

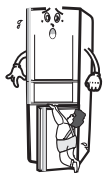
## SAFETY NOTES



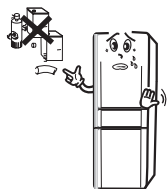
- ◆ **Cautions:** If the supply cord is damaged, it must be replaced by the manufacturer or their service agent or a similar qualified person in order to avoid any hazard.  
The power supply should not be reconnected within 5 minutes to prevent the compressor being damaged.



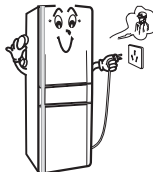
- ◆ Do not use flammable gas near the refrigerator, such as spray-paint, coating, etc, in case of danger of explosion.  
Note: Do not place the refrigerator outdoor or expose to rain.



- ◆ Do not let children play and hang on the refrigerator to avoid injury and the damage of the apparatus.



- ◆ Do not store any flammable and explosive dangerous goods, strong acid, alkali and other corrosive substance, such as butane, aether, benzene, vitriol, gasoline, alcohol, etc. Do not place bottled liquid foodstuff into the freezer, otherwise, the bottle will crack due to the frost.



- ◆ When the refrigerator cannot run normally or is damaged, please do not continue to use. Disconnect the power and call the local service center immediately.  
If the supply cord is damaged, it must be replaced by the manufacturer or their service agent or a similar qualified person in order to avoid any hazard.



- ◆ Do not spray water directly onto the refrigerator door and the electrical components in order to avoid any accidents.



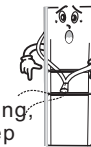
### WARNING

If there is a gas leak, it is necessary to close the gas valve first and take measures to ventilate and exchange indoor air. Do not pull out the plug first, because it may create sparks which can cause accidents.

## TROUBLE SHOOTING

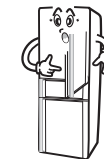
### ◆ The abnormal sound is heard.

- When the sound like stream flowing is heard, it is caused from the refrigerant flowing but it is not a failure.
- When the "rattle" sound is heard, it is caused by the switching of the solenoid valve or relay action and it is not a failure.
- When the little engine sound is heard after the unit stops functioning, it is caused by the rotation of the refrigerator circulation fan to keep the freezer temperature balanced but it is not a failure.



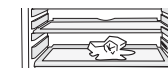
### ◆ Dew is found in the fruit and vegetable Crisper.

- It occurs when the door is open for a long time.
- The fluid food is not sealed.



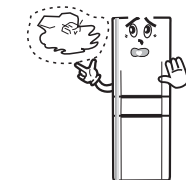
### ◆ The defrosting water enter into the compartment

- Water outlet is clogged.
- Unplug the refrigerator and clear the water drainage channel.



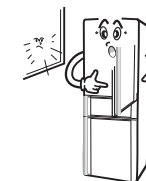
### ◆ Insufficient freezing of the Freezer

- The door is not closed correctly.
- There is damage or deformation to the door seal or the sealing is loose.
- There is heat source near the refrigerator or it is exposed to the direct sunlight.
- The poor air circulation inside the refrigerator.



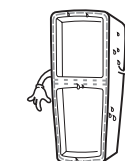
### ◆ The refrigerator is operating for a long period.

- The ambient temperature is higher in summer.
- Open the door too frequently.
- The big load food is placed close to the temperature sensor.
- The poor air circulation outside the refrigerator.



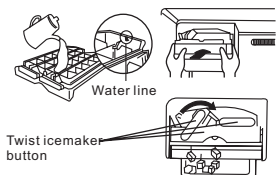
### ◆ The frost is produced in the middle girder and the frame

- The frost appears when the ambient humidity is high.
- Use the soft cloth to wipe the unit dry.



# DISMOUNT METHOD OF ATTACHMENT

## Use of accessories



### ◆ Twist icemaker for Ice making

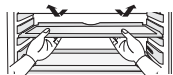
- Insert water at room temperature into the twist icemaker until the water reaches the water line;
- Press the twist icemaker gently into the ice making shelf;
- When taking out the ice, rotate the twist icemaker clockwise to the end and release it to rebound. That will separate the ice cubes from the ice tray easily and the ice can be stored in the Ice Storage tray directly;



### ◆ Wine Shelf

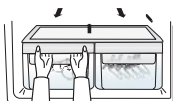
Multi-functional wine shelf can hold 3 tins drink horizontally or 1 bottled drink vertically;

## Disassembly of accessories



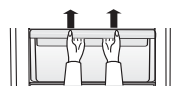
### ◆ Refrigerator shelf

Lift the rear of the refrigerator shelf to take it out.



### ◆ Vegetable crisper and cover

Pull the vegetable crisper till the limit to take it out. Lift the rear of the Vegetable crisper cover to remove it.



### ◆ Freezer drawer

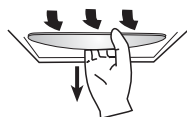
Pull it outside to the limit stop and raise, then it can be taken out.



### ◆ Big Bottle Guard ◆ Dairy Tray and Can guard

Lift it upward to remove it.

## Replacing the refrigerator lamp



### ◆ Remove the power plug.

Loosen off the screw at the back of lamp cover with the philips driver. Squeeze the lamp cover with both hands to deform it slightly to remove it.



### ◆ Remove the bulb by turning anticlockwise.



### ◆ Install the new bulb by turning clockwise.

First lock the hook at the front of the lamp cover, then lock the hook at the back of the lamp cover. And finally tighten the screw.

Lamp parameter: 220V/240V, 25W, E14

# SAFETY NOTES

## PRECAUTIONS

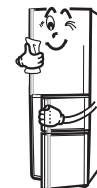
- When comparing rated refrigerators, please check the refrigerator type and serial number.
- Before connecting the power, please check if the refrigerator voltage range is compliant with the supply voltage. The voltage range is 187-242V; to assure the use safely, the socket and the connecting wire must support the circuit above 10A;
- When the refrigerator is connected, the food should not be put into it until it is cooled completely;
- During power failure, the refrigerator should not be connected until five minutes later to avoid any damage to the compressor;
- Do not touch the evaporator of the freezer with wet hands in case the water on the hand freezes and sticks;
- Do not put foodstuff near the temperature sensor to avoid affecting the correct display of temperature;
- It is not necessary to leave the door open for a long period or frequently open and close in high-temperature season, as this will reduce the unit's efficiency and increase load during the operation;
- Keep in mind not to overturn the refrigerator or position horizontally. When it is necessary to incline, the slope between the refrigerator body and the ground should be larger than 45 degrees;
- Do not move the refrigerator with the door handle or pull the handle up and down with extreme force;
- Please close the drawer before closing the refrigerator door to avoid damaging the drawer;
- When a lot of hot things are put into the refrigerator once or the door is open frequently or left open for a long period, the temperature in the refrigerator will increase and the temperature display will flash. Usually it will return to normal within 24 hours;

## WARNING

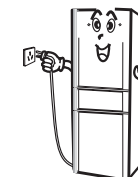
- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- Do not damage the refrigerant circuit.
- Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.

# PRE-RUNNING ISSUES

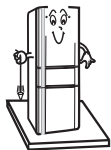
1. Disassemble all packaging components. The foam bottom mat must be removed before operating the unit.
2. Wipe the inner and outer of the refrigerator with warm and wet cloth (It is advisable to add a little neutral cleanser to the warm water).



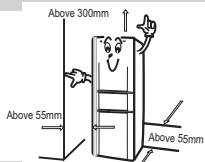
3. Let it stand for about 1 hour and then plug in. Be careful to operate correspondingly in accordance with the content on the refrigerator display window.



## ■ INSTALLATION AND POSITIONING NOTES



- ◆ The ground on which the refrigerator is placed should be flat and firm. If some unevenness exists, the refrigerator level can be adjusted through rotating the adjustable feet under the refrigerator body (counterclockwise direction means rising). At the bottom of the adjustable foot is an adjustable hole which can be easily inserted by simple tools such as philips driver, etc. for the regulation. (see left picture)



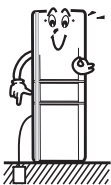
- ◆ The distances between the wall and the back and the side of refrigerator should not be less than 55mm. The height above the top should not be less than 300 mm.



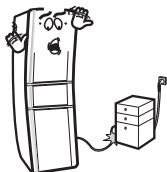
- ◆ The refrigerator should be kept away from the heat source, and avoid the direct sunlight.



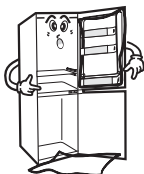
- ◆ -Do not place the unit in a humid environment to avoid the metal components get rusted and reducing the insulation effect. Besides the wire, the leakage protector must be installed if the unit is placed near humid areas such as the water pool and the basement.  
-If the refrigerator is flooded by water in a natural disaster (such as rainstorm, accident), it is necessary to refer to the designated Samsung service centers and use it after ensuring of its good condition.



- ◆ -Please be sure to use individual three-core power socket with ground wire. Do not share the socket with other electrical appliances;  
-For personal safety, please be sure to connect the ground wire correctly, The earthed pole of the socket should have reliable ground wire;  
-Do not connect the ground wire to any unsafe places such as water pipe, gas pipe, telephone line, and lightning conductor line, etc.



- ◆ -Do not to press against the power cord.  
-Do not place and use an electro-heat electric appliance on the top of the refrigerator such as microwave oven, electric cooker and voltage regulator, etc.

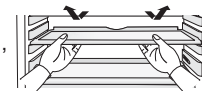


- ◆ Please remove the door seal before disposing of the refrigerator to avoid any accidents.

## ■ MAINTENANCE AND CLEANING

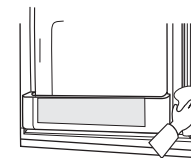
### ◆ Internal accessories

Take out all shelves, door shelves, crisper, covers, drawers, etc., and clean them with soft cloth moistened with luke-warm water or neutral cleanser (for dishes). After using the cleanser, they must be cleaned with clean water and be wiped up with a dry cloth.



### ◆ The door seal

Please clean the door seal carefully and the groove is cleaned with a wood chopstick entangling with cotton strip. When inserting the door seal after cleaning, the four corners should be secured firmly and the door seal is inserted it sect by sect.



### ◆ Defrosting methods

When a lot of ice or frost stayed on the evaporator of the CoolSelect Zone and the freezer, the freezing function will be affected and the power consumption is increased. When the frost layer on the evaporator gets thicker, the refrigerator must be defrosted. It is advised to defrost twice a year.

#### PRECAUTIONS

1. Before defrosting, the refrigerator must be disconnected from the power;
2. The good time for defrosting is when the Freezer and the CoolSelect Zone is entirely or nearly empty;
3. If there is still some food in the Freezer and the CoolSelect Zone before defrosting, the refrigerator can enter into the Super Freeze function. About 2 hours later, the food temperature will decrease to a very low level which where the food can be kept freshly for some time;
4. Before defrosting, please be sure to take out all the foodstuff in the drawers of the Freezer and the CoolSelect Zone and store them in the cooling place. Defrosting must be done as soon as possible (the longer the food is placed under room temperature, the more unsuitable for the long-term storage);
5. Do not defrost the Freezer with metal or sharp tools in case they may damage the refrigerator;
6. Do not defrost the Freezer using an electric heater;
7. After defrosting, please be sure to clean the Freezer thoroughly;

### Notes for inside and outside cleaning of the refrigerator

- The power plug must be removed from the outlet before cleaning, the interval time between plugging and unplugging should be more than 5 minutes;
- When cleaning, no water is allowed to enter into the lamp box and the control panel cover;
- Clean with soft cloth dipped with luke-warm water or neutral detergent, and wipe up with dry cloth;
- Clean the water drainage channel and the weep hole at the bottom of the Fridge and the CoolSelect Zone frequently to ensure the smooth drainage;
- Do not use the detergent containing abrasive (such as toothpaste), acid content, chemical solvents (such as alcohol) or polishing for cleaning.

#### PRECAUTIONS

Please do the following inspection after the maintenance :

- If there is crack or damage on the power wire.
- If the power plug has been inserted into the socket correctly.
- If there is any abnormal heat in the power plug etc..



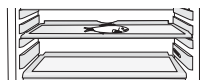
## STORING FOODS



- ◆ Pack the foods with freshness reserving bags (films) or seal the food container with a lid to prevent drying or bad odor escaping.



- ◆ Hot food or drink should be cooled to the room temperature before placing into the refrigerator,



- ◆ The cooked food and raw food should be separately.



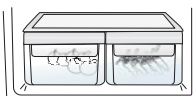
- ◆ It is not suitable to put the food too close to each other. Enough place should be left for the air circulating cycle.  
Note:  
1. Please keep the food away from the temperature sensor.  
2. The food and the container should not be place closely to the back plate.



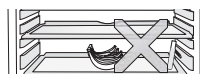
- ◆ Store foods in smaller portions.



- ◆ Dry the fruits and vegetables for storage after washing.

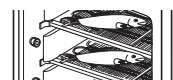


- ◆ - Vegetable and fruit can be stored in this compartment.  
- It is possible, if you need more space to store vegetable and fruits, to remove drawers.  
- A declared storage volume of fresh food storage compartment is calculated with Fruit box removed.



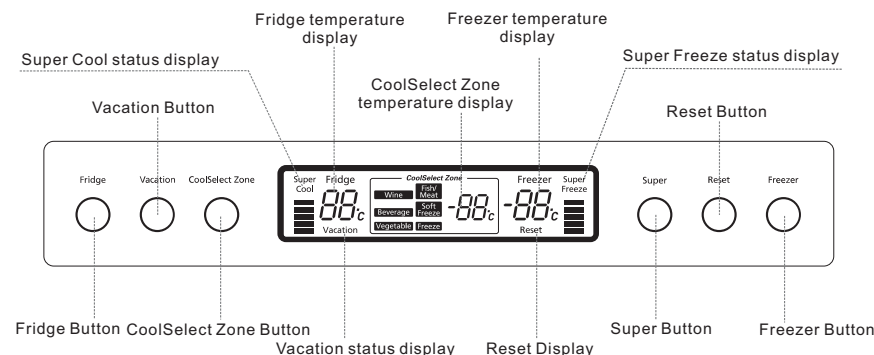
### PRECAUTIONS

The tropic fruit, such as bananas and pineapples, were not suitable to preserve in the refrigerator;  
Do not store the items with rigorous temperature requirements, such as blood serum, bacterin, academic data and so on.



Tip: If it is necessary to store big food load, make ice or fast refrigerate quickly, you may also take out the freezer drawer to freeze the food directly on the evaporator clapboard.

## CONTROL PANEL INTRODUCTION



### 1. Fridge Button

- 1-1. Press Fridge Button to set Fridge temperature;
- 1-2. Press Fridge Button, the "tinkle" sound is heard, and then the current refrigerator set temperature will flicker. Press Fridge Button again to change the set temperature. Each time you press the Fridge Button, set temperature is displayed in sequence of 5°C → 4°C → 3°C → 2°C → 1°C → 9°C → 8°C → 7°C → 6°C → 5°C;
- 1-3. Each time you press the Fridge Button, the "tinkle" sound is heard;
- 1-4. Stop pressing the button for 5 seconds, the set value will be confirmed.
- 1-5. In the Vacation mode, there is no display for the Fridge temperature. There is no any respond when you press the Fridge Button;

### 2. Vacation Button

- 2-1. If the refrigerator is not running in the Vacation mode, you press the Vacation Button, and the "tinkle" sound is heard, then the refrigerator will start in the Vacation mode;
- 2-2. Vacation display will turn on after the Vacation is started. There is no display for the temperature of the Fridge and the Coolselect Zone;
- 2-3. In the Vacation mode, there is no "tinkle" sound when pressing the Reset Button, changing the Fridge temperature or setting the temperature of the CoolSelect Zone and there are no corresponding responses, either;
- 2-4. Press the Vacation Button again, the "tinkle" sound is heard. The refrigerator will exit the Vacation mode to return the operation mode prior to the Vacation mode.
- 2-5. Vacation function is designed for the refrigerator operation when the user is out. In the Vacation running status, refrigerator and CoolSelect Zone are not in the working status but only the Freezer;

### Note:

During the Vacation, please do not store food in the Fridge and the CoolSelect Zone.

## ■ CONTROL PANEL INTRODUCTION

### 3. CoolSelect Zone Button

- 3-1. Press the CoolSelect Zone Button to set the temperature of the CoolSelect Zone;
- 3-2. Press the CoolSelect Zone Button, the "tinkle" sound is heard, and then the current set temperature of the CoolSelect Zone will flicker. Press the Button again to change the set temperature. Each time you press the Button, the set temperature is displayed in sequence of 0°C (Fish/Meat) → -7°C (Soft Freeze) → -12°C (Freeze) → 10°C (Wine) → 4°C (Beverage) → 2°C (vegetable) → 0°C.
- 3-3. Each time you press the CoolSelect Zone Button, the "tinkle" sound is heard;
- 3-4. Stop pressing the Button for 5 seconds, and the set value will be confirmed.
- 3-5. CoolSelect Zone fine adjustment function: The temperature of the CoolSelect Zone is available for the fine adjustment around the set value. Press the CoolSelect Zone Button to start the fine adjustment, "00" displays. Each time you press the button, the bar will be set as 00 → 01 → 02 → 03 → 00. The larger the number is, the lower the temperature will be. It will quit the fine adjustment setting automatically 5 seconds after the stopping the button-press;
- 3-6. In the Vacation mode, there is no display for the temperature of CoolSelect Zone. There is no response when you press the CoolSelect Zone Button;

### 4. Super Cool Function/Super Freeze Function

- 4-1. Press the Super Button in the normal operation mode, and the Fridge will enter into the Super Cool status with the Super Cool display turning on; Press the Super Button again to exit the Super Cool status and enter into the Super Freeze status with the Super Freeze display turning on; Press the Super Button again to enter into the Super Cool and the Super Freeze status simultaneously with both the Super Cool and the Super Freeze display turning on; Press the Super Button again to return to the normal status;

### 5. Reset Function

- 5-1. If the refrigerator is not running in the Reset function, press the Reset Button to enter the Reset mode and the "tinkle" sound is heard;
- 5-2. In the Reset running status the refrigerator returns to the default factory status;
- 5-3. When the user changes the refrigerator setting, refrigerator will quit the Reset running status;
- 5-4. Press the Reset Button again in Reset running status, the refrigerator will exit the Reset running status with a "tinkle" sound.
- 5-5. The temperature of the CoolSelect Zone is controlled automatically at about 0°C.

## CONTROL PANEL INTRODUCTION ■

### 6. Freezer Button

- 6-1. Press the Freezer Button to set the Freezer temperature;
- 6-2. Press the Freezer Button, the "tinkle" sound is heard and then the current Freezer setup temperature will flicker. Press the Button again to change the set temperature. Each time you press the button, the set temperature is displayed in sequence of -18°C → -19°C → -20°C → -21°C → -22°C → -23°C → -15°C → -16°C → -17°C → -18°C;
- 6-3. Each time you press the Freezer Button, the "tinkle" sound is heard;
- 6-4. Stop pressing the Button for 5 seconds, then the set value will be confirmed.
- 6-5. Freezer temperature can be set in any mode;

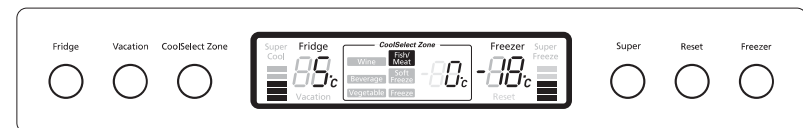
### 7. Door opening alarm Function

- 7-1. There will produce an alarm tone when the Fridge door is opened for two minutes, two alarm tones for three minutes and repeated alarm with a cycle of one-minute alarm and two-minute pause for four minutes to remind the user of closing the door;
- 7-2. When Fridge door is closed, alarm tones stop; if Fridge door is not yet closed after four minutes, the lamp will turn off, and the alarm tone will exist continuously to remind the user of closing the door;
- 7-3. When the Fridge door is opened, the Fridge fan will stop turning;

### 8. Operation Failure

- 8-1. When the refrigerator shows the following symptoms, please immediately to the qualified service personnel;
- 8-2. When the refrigerator temperature is flickering as "r5", "d5", "F5", "H5", "E5" refrigerator sensor might be damaged. Before the service, the damaged compartments are not working while the other compartments run normally;

## First power supply & temperature adjustment ■



After the power is on, all indications will display for 2 seconds, and the refrigerator starts to run. The Fridge default temperature is set at 5°C; the CoolSelect Zone temperature is set at 0°C; the Freezer temperature is set at -18°C. the actual temperatures of the Fridge will display, the CoolSelect Zone and the Freezer with start-up music.

It is recommended to run in the Reset status, also submitted to the adjustment in accordance with user's practical situation.